

WHAT IS CLAIMED IS:

1. A child seat for a vehicle, comprising:
a child seat; and
a shaft attached to the child seat;
wherein a first end of the shaft is disposed at a higher elevation than a second end of the shaft;
wherein the shaft is rotatable about an axis of the shaft; and
wherein the shaft includes at least one slit configured to accept a seat belt.
2. The child seat according to claim 1, wherein the at least one slit includes a lap belt slit configured to accept a lap belt and a shoulder belt slit configured to accept a shoulder belt.
3. The child seat according to claim 2, wherein the shoulder belt slit is disposed above the lap belt slit.
4. The child seat according to claim 1, wherein the shaft extends in a vertical direction.
5. The child seat according to claim 1, wherein the shaft is configured so that a seat belt inserted into the at least one slit winds around the shaft when the shaft is rotated.
6. The child seat according to claim 2, wherein the shoulder belt slit is disposed adjacent to the lap belt slit.
7. The child seat according to claim 2, wherein the shoulder belt slit and the lap belt slit have a common belt inlet.
8. A child seat for a vehicle, comprising:
a child seat; and
a drive train attached to the child seat;
wherein the drive train includes a rotatable shaft and a torque limiting device;
wherein the shaft includes at least one slit configured to accept a seat belt; and
wherein the torque limiting device is configured to prevent torque exerted on the shaft from exceeding a predetermined value.

9. The child seat according to claim 8, wherein the shaft is configured so that a seat belt inserted into the at least one slit winds around the shaft when the shaft is rotated.
10. The child seat according to claim 8, wherein the torque limiting device comprises a torque clutch.
11. The child seat according to claim 8, wherein the torque limiting device comprises a torque sensor.
12. A child seat according to claim 8, wherein the drive train further comprises a knob configured to enable a user to rotate the shaft.
13. A child seat according to claim 12, wherein the torque limiting device prevents a torque exerted on the knob from being transmitted to the shaft when the torque exerted on the knob exceeds a predetermined value.
14. An attachment mechanism for securing a child seat to a vehicle using a seat belt, comprising:
 - a rotatable shaft configured to be installed on a child seat;
 - wherein the shaft includes at least one slit configured to accept the seat belt;
 - and
 - wherein the shaft is configured so that a first end of the shaft is disposed at a higher elevation than a second end of the shaft when the shaft is installed on the child seat.
15. The attachment mechanism for securing a child seat to a vehicle using a seat belt according to claim 14, wherein the at least one slit includes a lap belt slit configured to accept a lap belt and a shoulder belt slit configured to accept a shoulder belt.
16. The attachment mechanism for securing a child seat to a vehicle using a seat belt according to claim 15, wherein the shoulder belt slit is disposed adjacent to the lap belt slit.
17. The attachment mechanism for securing a child seat to a vehicle using a seat belt according to claim 15, wherein the shoulder belt slit and the lap belt slit have a common belt inlet.

18. The attachment mechanism for securing a child seat to a vehicle using a seat belt according to claim 14, further comprising a torque limiting device, wherein the torque limiting device is configured to prevent torque exerted on the shaft from exceeding a predetermined value.
19. The attachment mechanism for securing a child seat to a vehicle using a seat belt according to claim 18, wherein the torque limiting device comprises a torque clutch.
20. The attachment mechanism for securing a child seat to a vehicle using a seat belt according to claim 18, wherein the torque limiting device comprises a torque sensor.
21. The attachment mechanism for securing a child seat to a vehicle using a seat belt according to claim 18, further comprising a knob configured to enable a user to rotate the shaft.
22. The attachment mechanism for securing a child seat to a vehicle using a seat belt according to claim 21, wherein the torque limiting device is configured to prevent a torque exerted on the knob from being transmitted to the shaft when the torque exerted on the knob exceeds a predetermined value.